

THE PRELUDE FROM...

ARTFUL DESIGN

TECHNOLOGY IN SEARCH OF THE SUBLIME



GE WANG

<https://artful.design/>

WHAT WE **MAKE**, **MAKES** US.



WE ARE HERE, AND THE TIME IS NOW...

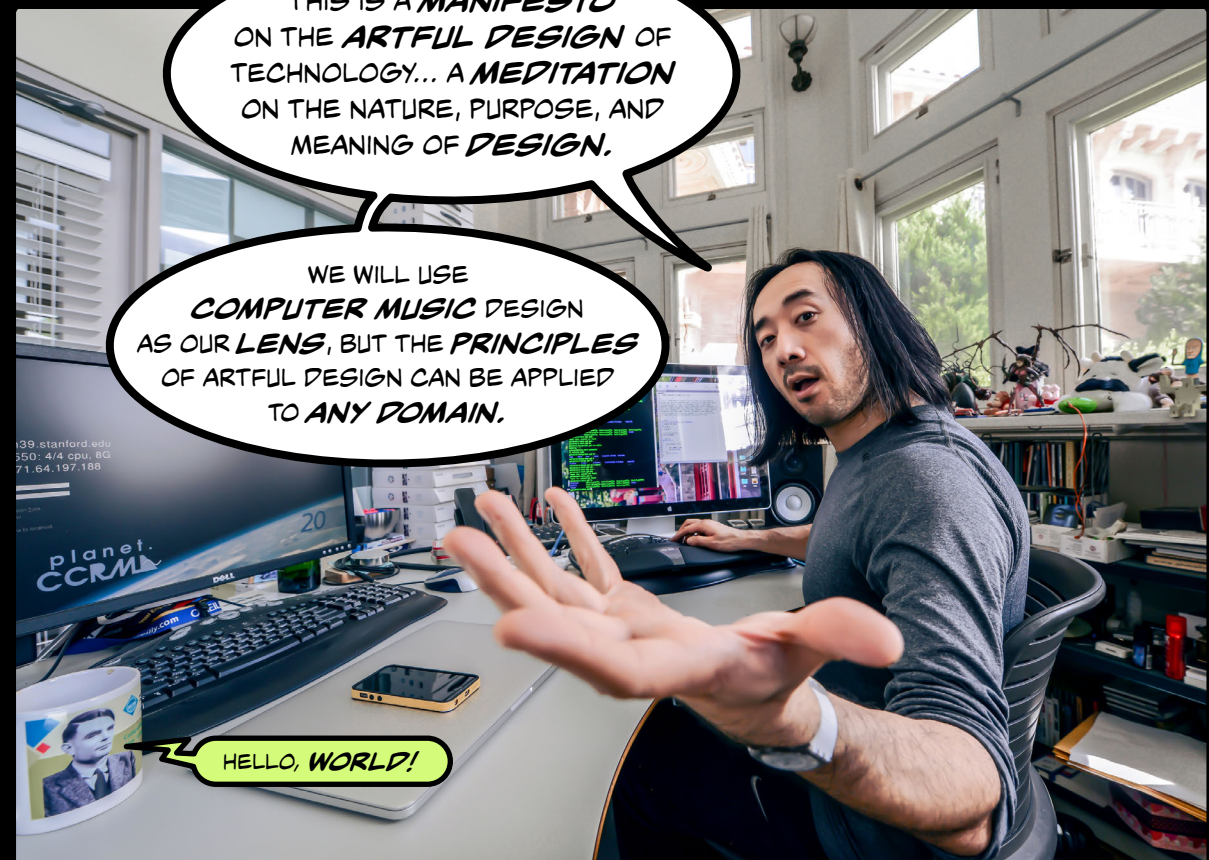


HI THERE!
I'M **GE!***

I AM A *DESIGNER*
AND A *COMPUTER MUSIC*
RESEARCHER.

C'MON IN!

**PRONOUNCED "GUH"*



THIS IS A *MANIFESTO*
ON THE *ARTFUL DESIGN* OF
TECHNOLOGY... A *MEDITATION*
ON THE NATURE, PURPOSE, AND
MEANING OF *DESIGN.*

WE WILL USE
COMPUTER MUSIC DESIGN
AS OUR *LENS*, BUT THE *PRINCIPLES*
OF *ARTFUL DESIGN* CAN BE APPLIED
TO *ANY DOMAIN.*



HELLO, WORLD!

I'M A PROFESSOR AT STANFORD UNIVERSITY, IN THE CENTER FOR COMPUTER RESEARCH IN MUSIC AND ACOUSTICS, OR CCRMA.*

*PRONOUNCED "KARMA"



I WORK WITH TECHNOLOGY TO CONNECT PEOPLE AND MUSICAL EXPRESSION...

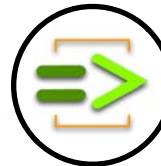
...AND USE DESIGN TO BIND TOGETHER TECHNOLOGY AND ART, ENGINEERING AND THE HUMANITIES.

THERE IS AN ART TO DESIGN.

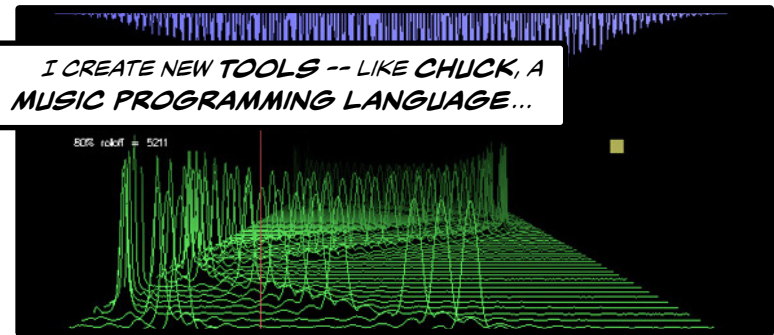


I DESIGN BY WRITING CODE.

```
// our radius
.99999 => float R;
// our delay order
500 => float L;
// set delay
L::samp => delay.delay;
// set dissipation factor
Math.pow( R, L ) => delay.gain;
// place zero
-1 => lowpass.zero;
```



I CREATE NEW TOOLS -- LIKE CHUCK, A MUSIC PROGRAMMING LANGUAGE...



```
// fire excitation
1 => imp.gain;
// for one delay round
L::samp => now;
// cease fire
0 => imp.gain;
```

...TO SYNTHESIZE NEW SOUNDS AND EXPERIMENT WITH MUSICAL INTERACTIONS.



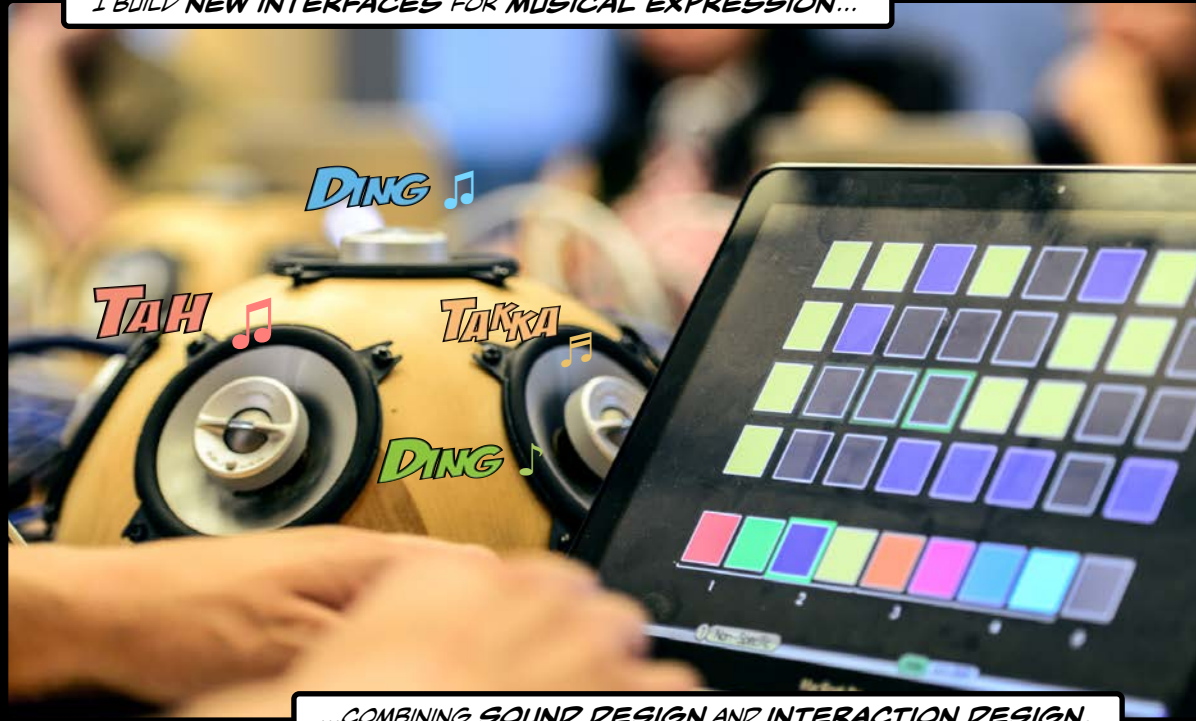
I CREATE TOOLS, TOYS, INSTRUMENTS, AND EXPERIENCES.



I DESIGN SOUND AND GRAPHICS IN TANDEM.



I BUILD NEW INTERFACES FOR MUSICAL EXPRESSION...



...COMBINING SOUND DESIGN AND INTERACTION DESIGN.



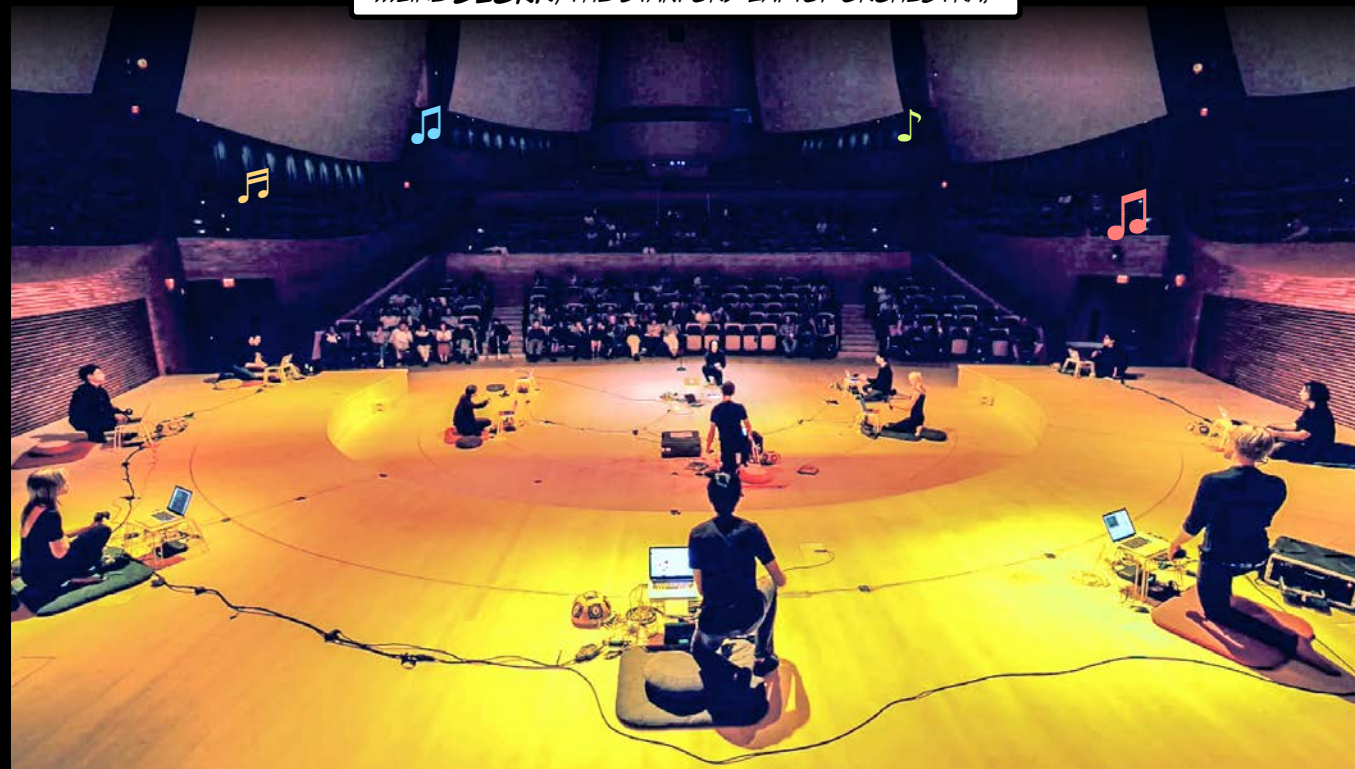
WE USE THESE INSTRUMENTS TO CRAFT PERFORMANCES FOR LAPTOP ENSEMBLES...



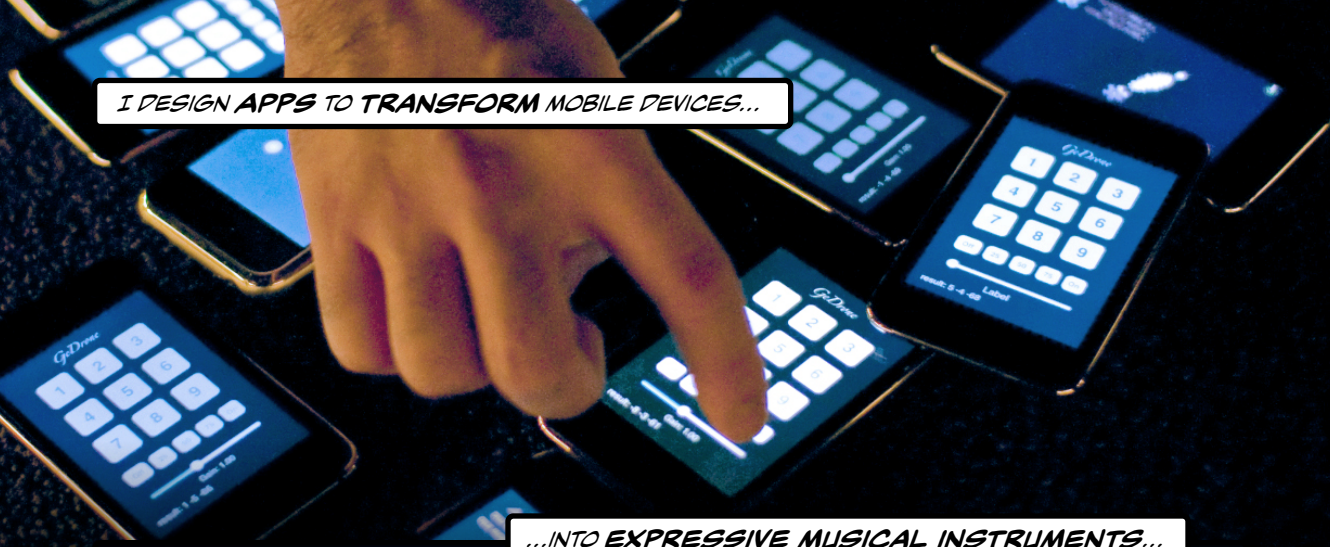
I INVENT NEW INSTRUMENTS THAT WE DON'T HAVE NAMES FOR -- AND THAT OFTEN DEFY CLASSIFICATION!



...LIKE SLORK, THE STANFORD LAPTOP ORCHESTRA!



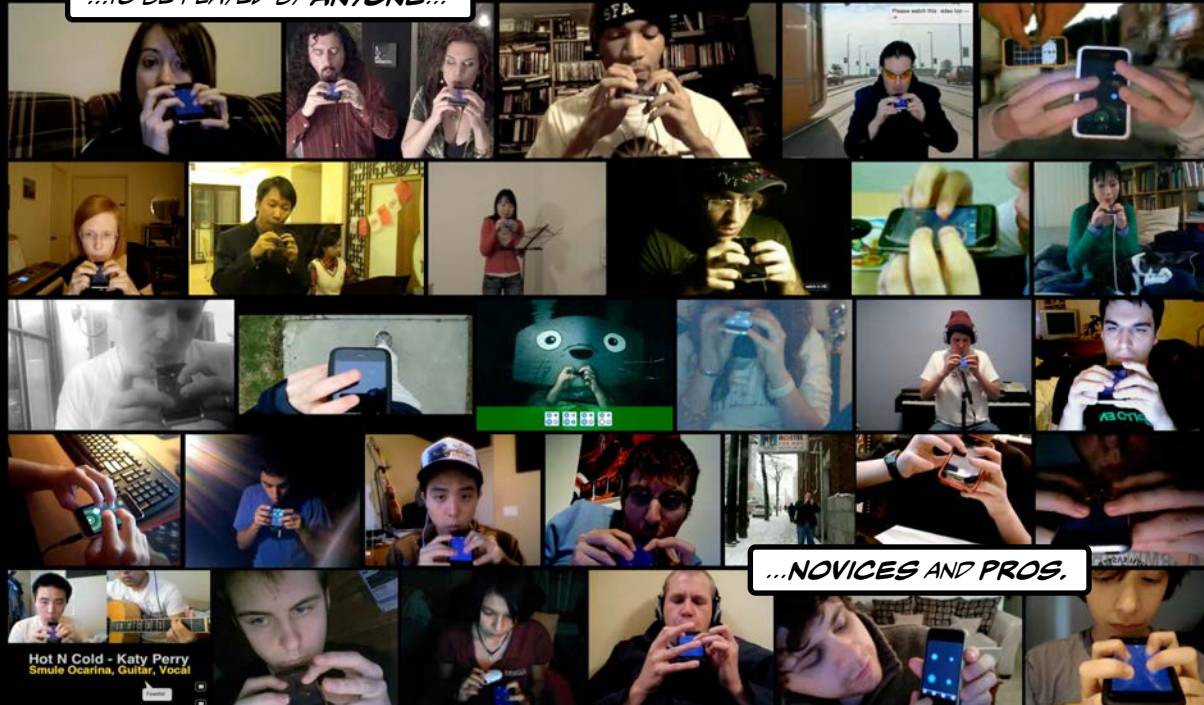
I DESIGN APPS TO TRANSFORM MOBILE DEVICES...



...INTO EXPRESSIVE MUSICAL INSTRUMENTS...



...TO BE PLAYED BY ANYONE...



...NOVICES AND PROS.

Hot N Cold - Katy Perry
Smule Ocarina, Guitar, Vocal

IN 2008, I CO-FOUNDED A MOBILE MUSIC STARTUP, CALLED SMULE...



...AND DESIGNED OCARINA FOR THE IPHONE.



HOW TO PLAY:

HOLD THE PHONE AS YOU MIGHT A SANDWICH.
BLOW INTO THE MICROPHONE TO PLAY;
USE MULTITOUCH TO CONTROL PITCH;
TILT THE PHONE DOWN TO ADD VIBRATO.

I SERVED AS CHIEF CREATIVE OFFICER AND CTO DURING OUR EARLY YEARS, UNTIL I STEPPED DOWN IN 2013.

WITHIN THAT TIME, I ALSO DESIGNED OCARINA 2, MAGIC PIANO, AND OTHER MUSIC-MAKING ARTIFACTS.



THESE GAMES, TOYS, INSTRUMENTS HAVE REACHED MORE THAN 200 MILLION USERS.

THERE IS *ANOTHER DIMENSION* TO ARTFUL DESIGN: A *SOCIAL FABRIC* THAT *CONNECTS* US IN NEW, EXPRESSIVE WAYS.

IN *OCARINA*, YOU CAN LISTEN TO OTHER PEOPLE PLAYING FROM ALL *CORNERS* OF THE WORLD.

IN LOUISIANA, SOMEONE PLAYS THE THEME FROM *LEGEND OF ZELDA*...

...OR, FROM HAWAII, "*SILENT NIGHT*."

"*AMAZING GRACE*" IS A GLOBAL FAVORITE.

LISTENING TO THE WORLD CAN MAKE YOU FEEL BOTH *ALONE* AND *CONNECTED* AT THE SAME TIME.

THIS IS DESIGN AS *EXPERIENCE*, *VISCERAL* AND *HUMAN*...

...A SMALL FEELING THAT THERE IS *SOMEONE*, *SOMEWHERE OUT THERE*... AND THAT WE ARE MORE *ALIKE* THAN DIFFERENT.

THIS KIND OF DESIGN WOULD NOT BE POSSIBLE WITHOUT *TECHNOLOGY*...

...YET HOPEFULLY THE USER *NEVER* *NOTICES* THE TECHNOLOGY.

REFLECTING SOMETHING OF OUR NATURE, TECHNOLOGY PUSHES *FORWARD*, ALWAYS *CHANGING*, EVER *EVOLVING*.

IT IS *ARTFUL DESIGN* -- HOW WE *MAKE USE* OF TECHNOLOGY -- THAT IS OUR *CONSTANT*. DESIGN SHOULD *UNDERSTAND* SOMETHING OF OUR NEEDS, DREAMS, FEARS. IT SHOULD *ENRICH* OUR LIVES, REINFORCE OUR *HUMANITY*. DESIGN SHOULD MAKE US *FEEL*.

NO MATTER YOUR WALK OF LIFE OR WHAT YOU THINK ABOUT *TECHNOLOGY* OR *ART*, AND *NO MATTER* OUR DIFFERENCES, I *INVITE* YOU TO VENTURE INTO A REALM WHERE *TECHNOLOGY* MEETS *THE INTANGIBLE*...

A REALM OF..

ARTFUL DESIGN

TECHNOLOGY IN SEARCH OF THE SUBLIME



written and designed by

GE WANG

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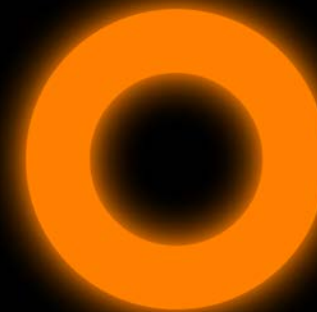
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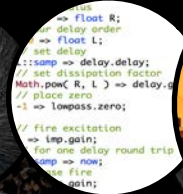
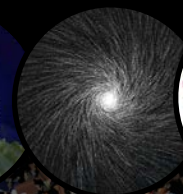
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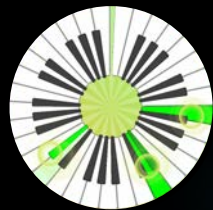
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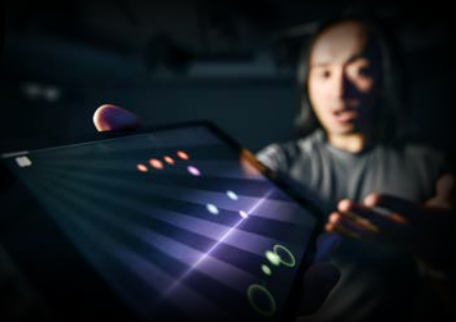
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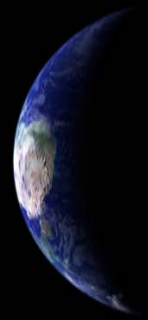
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MANIFESTO

In our age of rapidly evolving technology and unyielding human restlessness and discord, design ought to be more than simply functional; it should be expressive, socially meaningful, and humanistic. Design should transcend the purely technological, encompass the human, and strive for the sublime.

Sublime design presents itself, first and last, as a useful thing, but nestled within that window of interaction lies the novel articulation of a thought, an idea, a reflection—an invisible truth that speaks to us, intimate yet universal, purposeful without necessity of purpose, that leaves us playful, understood, elevated. It is a transformation so subtle that it escapes our conscious grasp but that once experienced—like music—we would never want to be without again.

Design should be artful.

<https://artful.design/>